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RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/687,230

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DATE: 10/27/2000 TIME: 13:14:26

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10	14 aas	aaco	gat	atta	ataa	at a	toga	ccta	q ta	gaaq	ttga	ggc	tgcc	tgg	tatt	tgatta	2138
10	is duc	atta	tat	acat	actt	tt t	catt	ctta	a ct	taga	aatq	ctt	ttca	gaa	gata	ttaaat	2198
10	is cat	tata	aat	tata	t+++	ta a	ttaa	actt	t ta	qaac	ageq	aat	ttgq	atg	ttcc	agaggt	2258
7.	00 tgg	actt	ata	ttag	gtaa	ta a	aget	ggae	c ta	qqac	tegt	gaq	gaaq	ga			2307
)3 <21					u	-900	. , ,		,,,		, ,		-			
	$\frac{13}{4}$ < 21																
21	/4 \21		LLINGI														



RAW SEQUENCE LISTING DATE: 10/27/2000 PATENT APPLICATION: US/09/687,230 TIME: 13:14:26

Input Set : A:\1027-seq.app

Output Set: N:\CRF3\10272000\1687230.raw

205 <212> TYPE: PRT 206 <213> ORGANISM: PI3' Kinase 208 <400> SEQUENCE: 2 209 Met Gly Lys Lys His Lys Lys His Lys Ser Asp Lys His Leu Tyr Glu 210 1 5 10 212 Glu Tyr Val Glu Lys Pro Leu Lys Leu Val Leu Lys Val Gly Gly Asn 213 20 25 30 215 Glu Val Thr Glu Leu Ser Thr Gly Ser Ser Gly His Asp Ser Ser Leu 216 35 40 45218 Phe Glu Asp Lys Asn Asp His Asp Lys His Lys Asp Arg Lys Arg Lys 219 55 55 60 221 Lys Arg Lys Lys Gly Glu Lys Gln Ile Pro Gly Glu Glu Lys Gly Arg 222 $\,$ 65 $\,$ 70 $\,$ 75 $\,$ 80 224 Lys Arg Arg Arg Val Lys Glu Asp Lys Lys Lys Arg Asp Arg Asp Arg 225 85 90 95 227 Val Glu Asn Glu Ala Glu Lys Asp Leu Gln Cys His Ala Pro Val Arg 228 100105110 230 Leu Asp Leu Pro Pro Glu Lys Pro Leu Thr Ser Ser Leu Ala Lys Glu 231 115120125 233 Glu Glu Val Glu Gln Thr Pro Leu Gln Glu Ala Leu Asn Gln Leu Met 234 130 135 140 236 Arg Gln Leu Gln Arg Lys Asp Pro Ser Ala Phe Phe Ser Phe Pro Val 237 145 150150155160 239 Thr Asp Phe Ile Ala Pro Gly Tyr Ser Met Ile Ile Lys His Pro Met 240 165 170 175 242 Asp Phe Ser Thr Met Lys Glu Lys Ile Lys Asn Asn Asp Tyr Gln Ser 243 180 245 Ile Glu Glu Leu Lys Asp Asn Phe Lys Leu Met Cys Thr Asn Ala Met 246 195 200 205 248 Ile Tyr Asn Lys Pro Glu Thr Ile Tyr Tyr Lys Ala Ala Lys Lys Leu 249 210. 215 220 251 Leu His Ser Gly Met Lys Ile Leu Ser Gln Glu Arg Ile Gln Ser Leu 252 225 230 230 240 254 Lys Gln Ser Ile Asp Phe Met Ala Asp Leu Gln Lys Thr Arg Lys Gln 255 245250250 257 Lys Asp Gly Thr Asp Thr Ser Gln Ser Gly Glu Asp Gly Gly Cys Trp 258 265 270 260 Gln Arg Glu Arg Glu Asp Ser Gly Asp Ala Glu Ala His Ala Phe Lys 261 275280285 263 Ser Pro Ser Lys Glu Asn Lys Lys Lys Asp Lys Asp Met Leu Glu Asp 264 290 295 300

 266 Lys Phe Lys Ser Asn Asn Leu Glu Arg Glu Gln Glu Gln Leu Asp Arg

 267 305
 310

 315
 320

 269 Ile Val Lys Glu Ser Gly Gly Lys Leu Thr Arg Arg Leu Val Asn Ser 270 325 330 330 335 272 Gln Cys Glu Phe Glu Arg Arg Lys Pro Asp Gly Thr Thr Thr Leu Gly 273 $340 \hspace{1.5cm} 345 \hspace{1.5cm} 350$ 275 Leu Leu His Pro Val Asp Pro Ile Val Gly Glu Pro Gly Tyr Cys Leu 355 360

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/687,230 DATE: 10/27/2000 TIME: 13:14:26

Input Set : A:\1027-seq.app
Output Set: N:\CRF3\10272000\1687230.raw

278 279		Arg 370	Leu	Gly	Met	Thr	Thr 375	Gly	Arg	Leu	Gln	Ser 380	Gly	Val	Asn	Thr
			C1	Dho	T	c1		T	1	Non.	T		mb w	D===	un 1	T 0
		GIII	GLY	Pne	ьуs		Asp	Lys	Arg	ASII	-	vaı	Thr	Pro	Val	
	385					390					395		_			400
	Tyr	Leu	Asn	Tyr	-	Pro	Tyr	Ser	Ser	-	Ala	Pro	His	Туr	Asp	Ser
285					405					410					415	
287	Thr	Phe	Ala	Asn	Ile	Ser	Lys	Asp	Asp	ser	Asp	Leu	Ile	Tyr	Ser	Thr
288				420					425					430		
290	Tyr	Gly	Glu	Asp	Ser	Asp	Leu	Pro	Ser	Asp	Phe	Ser	Ile	His	Glu	Phe
291	_	_	435	_		_		440		_			445			
293	Leu	Ala	Thr	Cys	Gln	Asp	Tyr	Pro	Tyr	Val	Met	Ala	Asp	Ser	Leu	Leu
294		450		•			455		•			460				
			Leu	Thr	Lvs	Glv	Glv	His	Ser	Arg	Thr	Leu	Gln	Glu	Met	Glu
	465				-1-	470	2				475					480
		Ser	T.e.u	Pro	Glu		Glo	Glv	ніс	Thr		Thr	T.o.u	λen	Thr	
300	IIC C	JCI	DC u	110	485	пор	OIU	O17	1113	490	nrg	1111	цец	пэр	495	GLY
	tuo	C1	Mot	Clu		тЪо	mb ~	C1.,	17.2		Dro	Dro	C111	7 20	Leu	Nan
	пуs	GIU	met	500	GIII	116	TIII	GIU		GIU	PIO	PIU	GTÅ	-	ьец	ASP
303	_	_			_	_	_		505	_	_			510	_	_,
	ser	ser		GIR	Asp	arg	Leu		Ala	ren	ьуs	АТа		Thr	Asn	Pne
306			515				_	520					525			
			Pro	Val	Glu	Val		Asp	Ser	Glu	Glu		Glu	Ile	Phe	Gln
309		530					535					540				
311	Lys	Lys	Leu	Asp	Glu	Thr	Thr	Arg	Leu	Leu	Arg	Glu	Leu	Gln	Glu	Ala
312	545					550					555					560
314	Gln	Asn	Glu	Arg	Leu	ser	Thr	Arg	Pro	Pro	Gly	Asn	Met	Ile	Cys	Leu
315					565					570					575	
317	Leu	Gly	Pro	Ser	Ser	Glu	Lys	Cys	Ile	Leu	Leu	Asn	Lys			
318		-		580			-	-	585				-			





VERIFICATION SUMMARY

PATENT APPLICATION: US/09/687,230

DATE: 10/27/2000 TIME: 13:14:27

Input Set : A:\1027-seq.app

Output Set: N:\CRF3\10272000\1687230.raw

L:11 M:270 C: Current Application Number differs, Replaced Current Application Number
L:31 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEQ ID#:1, CDS LOCATION: Complement((162)..(1928))
L:39 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEQ ID#: 1, CDS LOCATION:0..162